

Amendments to the Claims

1. **(Currently Amended)** An isolated nucleic acid molecule encoding a branching enzyme from a bacterium of the genus *Neisseria* selected from the group consisting of
  - (a) a nucleic acid molecules encoding a protein which comprises the amino acid sequence depicted in SEQ ID NO. 2;
  - (b) a nucleic acid molecules comprising the coding region depicted in SEQ ID NO. 1;
  - (c) a nucleic acid molecules encoding a protein which comprises the amino acid sequence encoded by the insert in plasmid DSM 12425;
  - (d) a nucleic acid molecules comprising the coding region for ~~a branching enzyme~~, which is contained in the insert of the plasmid DSM 12425;
  - (e) a nucleic acid molecules encoding a protein the sequence of which has, in the first 100 amino acids, a homology of at least ~~65~~95% to the amino acid sequence depicted in SEQ ID NO. 2; and
  - (f) a nucleic acid molecules ~~the complementary strand of which hybridizes to a nucleic acid molecule of (a), (b), (c), (d) and/or (e) and which encode a branching enzyme from a bacterium of the genus *Neisseria*~~having more than 90% identity with SEQ ID NO:1; and
  - ~~(g) nucleic acid molecules the sequence of which deviates from the sequence of a nucleic acid molecule of (f) due to the degeneracy of the genetic code.~~
2. **(Original)** A vector containing a nucleic acid molecule according to claim 1.
3. **(Original)** The vector according to claim 2, wherein the nucleic acid molecule is linked in sense-orientation to regulatory sequences guaranteeing the transcription in prokaryotic or eukaryotic cells.

4. **(Original)** A host cell which is genetically modified with a nucleic acid molecule according to claim 1 or with a vector according to claim 2 or 3.
5. **(Original)** A method for producing a branching enzyme from a bacterium of the genus *Neisseria*, wherein a host cell according to claim 4 is cultivated under conditions allowing the expression of the protein, and wherein the protein is isolated from the cultivated cells and/or the culture medium.
6. **(Withdrawn)** A method for producing a branching enzyme from a bacterium of the genus *Neisseria*, wherein the protein is produced in an in-vitro transcription and translation system using a nucleic acid molecule according to claim 1.
7. **(Withdrawn)** A protein encoded by a nucleic acid molecule according to claim 1 or obtainable by a method according to claim 5.
8. **(Withdrawn)** An antibody which specifically recognises a protein according to claim 7.
9. **(Withdrawn)** Use of a protein according to claim 7 for producing  $\alpha$ -1,6-branched  $\alpha$ -1,4-glucans in in-vitro systems.
10. **(Original)** A transgenic plant cell containing a nucleic acid molecule according to claim 1, wherein the nucleic acid molecule is linked to regulatory sequences guaranteeing the transcription in plant cells.
11. **(Original)** The transgenic plant cell according to claim 10, wherein the nucleic acid molecule is linked to a sequence encoding a signal sequence which guarantees the localisation of the encoded protein in the plastids of the cells.
12. **(Original)** A transgenic plant containing plant cells according to claim 10.

13. **(Original)** A method for producing a transgenic plant, wherein
- (a) a plant cell is genetically modified by introducing a nucleic acid molecule according to claim 1 or a vector according to claim 2 or 3;
  - (b) a plant is regenerated from the cell produced according to step (a); and
  - (c) optionally further plants are produced from the plant produced according to step (b).
14. **(Original)** Harvestable parts of plants according to claim 1, wherein said parts of plants contain transgenic plant cells.
15. **(Withdrawn)** Starch obtainable from transgenic plant cells according to claim 1 or from parts of plants containing said transgenic plant cells.
16. **(Withdrawn)** The starch according to claim 15, wherein the composition of the starch is modified in such a way that it has an increased gel texture and/or a reduced phosphate content and/or a reduced peak viscosity and/or a reduced pastification temperature and/or a reduced size of the starch granules and/or a modified distribution of the side-chains in comparison with the starch from corresponding wild type plants.
17. **(NEW)** The nucleic acid molecule according to claim 1 having more than 95% identity with SEQ ID NO:1.